

AMENDMENTS TO THE CLAIMS

This listing and version of the claims replace all prior listing and versions of the claims.

Listing of Claims:

1-5. (cancelled)

6. (Currently amended) A sealant region for encapsulating at least one display device comprising one or more layers of material forming a pixel disposed over a first substrate, the sealant region comprising:

~~a plurality of parallel openings in a first material layer on a first substrate to expose a second material layer underneath~~

a first material layer formed over the pixel, the first material layer comprising a plurality of parallel openings formed therethrough to expose a surface of the pixel; and

a predetermined sealant ~~placed thereon~~disposed to form the sealant region perpendicular to the openings for attaching a second substrate,

wherein the sealant is disposed over and contacts the first material layer and ~~the second material layer through the openings~~ is disposed within the openings to contact the exposed surface of the pixel for ~~encapsulating~~sealing the display device pixel between the first and second substrates, and

wherein the sealant has substantially flat contact surfaces with the first ~~and second material layers~~layer and the exposed surface of the pixel.

7. (Previously presented) The sealant region of claim 6 wherein the openings have a uniform width.

8. (Currently amended) The sealant region of claim 6 wherein the first material layer is an organic polymer layer and the ~~second material~~exposed surface of the pixel comprises layer ~~is a~~ passivation layer.

9-20. (cancelled)

21. (Previously presented) The sealant region of claim 6, wherein the first material layer is an organic polymer layer.

22. (Currently amended) The sealant region of claim 6, wherein the ~~second material~~exposed surface of the pixel comprises layer is a dielectric layer.

23.- 37. (Canceled)

38. (New) The display device of claim 6, wherein the sealant in the openings is balanced along a center axis of the sealant region.

39. (New) The display device of claim 6, wherein a width of the openings is narrower than a total width of the sealant region.

40. (New) A display device, comprising:

a device substrate comprising one or more layers of material forming a pixel disposed over the device substrate;

a first material layer formed over the pixel, the first material layer comprising a plurality of parallel openings formed therethrough to expose a surface of the pixel;

a predetermined sealant disposed to form the sealant region perpendicular to the openings for attaching a shield substrate, wherein the sealant is disposed over and contacts the first material layer and is disposed within the openings to contact the exposed surface of the pixel for sealing the pixel between the device and shield substrates, and the sealant has substantially flat contact surfaces with the first material layer and the exposed surface of the pixel; and

at least one transistor coupled to the device substrate for driving the pixel.

41. (New) The display device of claim 40, wherein the sealant in the openings is balanced along a center axis of the sealant region.

42. (New) The display device of claim 40, wherein the openings have a uniform width.

43. (New) The display device of claim 40, wherein a width of the openings is narrower than a total width of the sealant region.

44. (New) A display device, comprising:

a device substrate comprising one or more layers of material forming a pixel disposed over the device substrate;

a first material layer formed over the pixel, the first material layer comprising a serpentine opening formed therethrough to expose a surface of the pixel;

a predetermined sealant disposed to form the sealant region substantially covering the serpentine opening for attaching a shield substrate, wherein the sealant is disposed over and contacts the first material layer and within the serpentine opening to contact the exposed surface of the pixel for sealing the pixel between the device and shield substrates; and

at least one transistor coupled to the device substrate for driving the pixel.

45. (New) The display device of claim 44, wherein the sealant in the serpentine opening is balanced along a center axis of the sealant region.

46. (New) The display device of claim 44, wherein the serpentine opening has a uniform width along a plurality of segments thereof.

47. (New) The display device of claim 44, wherein the serpentine opening has a saw-tooth form.

48. (New) The display device of claim 47, wherein the saw-tooth form is modified to avoid sharp angles.

49. (New) The display device of claim 44, wherein the serpentine opening has an interlaced form.

50. (New) A sealant region for sealing a pixel between two substrates, comprising:

a first substrate comprising one or more layers of material forming a pixel disposed thereon;

a first material layer formed over the pixel, the first material layer comprising a plurality of parallel openings formed therethrough to expose a surface of the pixel; and

a sealant disposed to form a sealant region for attaching a second substrate, wherein the sealant is disposed over a portion of the first material layer and across and within the openings to contact the exposed surface of the pixel for sealing the pixel between the first and second substrates, the first material layer continuously extending from an edge of the sealant region to an opposite edge of the sealant region.

51. (New) The display device of claim 50, wherein the sealant in the openings is balanced along a center axis of the sealant region.

52. (New) The display device of claim 50, wherein the openings have a uniform width.

53. (New) The display device of claim 50, wherein a width of the openings is narrower than a total width of the sealant region.